

The Honorable Christopher Bond
United States Senator
Office of Constituent Services
308 East High Street, Suite 202
Jefferson City, MO 65101

29 JUN 2004

Attention: Liz Behrouz

Dear Senator Bond:

Thank you for your recent inquiry to EPA on behalf of your constituent group *Herculaneum Today & Tomorrow*. While much progress has been made in addressing the lead contamination in Herculaneum, response actions have not been completed. I hope the responses to *Herculaneum Today & Tomorrow's* questions will clarify any uncertainty about EPA's work in their community.

Question 1: What additional measures may be effective at further reducing lead contamination in yards along haul routes?

Answer: To date, EPA has required Doe Run to excavate lead-contaminated surface soil in yards along haul routes where lead concentrations exceed 400 parts per million (ppm). EPA has also mandated that Doe Run implement best management practices at the smelter which include the installation of a permanent vehicle wash facility, the washing of all vehicles exiting the facility, and cleaning of haul route streets daily. Street cleaning trials on the haul route in Herculaneum determined that pressure washing followed by high suction vacuuming was more effective at reducing lead dust loadings and concentrations than the dry/HEPA vacuum street cleaners currently employed at the site. However, EPA believes that the HEPA street cleaners were adequately effective in cleaning streets and preventing the recontamination of yards. Current monitoring of surface soils in yards located adjacent to the haul routes has not detected a significant increase in lead concentrations, which would indicate that these measures have been effective in reducing the recontamination of yard soils.

If future monitoring indicates a need to further reduce contamination along haul routes, additional control measures could be implemented at the smelter that



would likely reduce fugitive dust emissions. These include creating a negative pressure on operations buildings and enclosing outside materials storage areas with buildings that are also operated under negative air pressure. Other possible actions include the use of alternate transportation routes or use of rail.

Question 2: At what point will the redeposition study be considered "complete?"

Answer: EPA will be conducting surface soil sampling or overseeing sampling conducted by Doe Run for as long as the smelter is in operation. EPA believes this sampling is necessary because smelter operations will always pose a potential threat of lead contamination to residential properties located near the smelter. There currently is not enough scientific data to accurately determine the distance from the smelter in which lead redeposition would be a threat. Nor is there enough data to accurately calculate redeposition rates. EPA will periodically evaluate the redeposition data for upward trends. If and when the redeposition data conclusively indicates that recontamination is occurring at a rate that will ultimately present unacceptable risk to human health, EPA will take action to address this circumstance.

Question 3: How will the redeposition data, once complete, be used to determine if re-occupancy of a residence is a risk to human health, i.e. how will an "unacceptable" rate of redeposition be determined?

Answer: EPA has determined that lead levels exceeding 400 parts per million (ppm) in residential surface soil pose an unacceptable health risk at the Herculaneum site, regardless of whether the lead contamination was historical or recent redeposition. EPA believes that a repeating cycle of yard recontamination and re-excavation of contaminated soil is an unacceptable solution at this site due to the burden it places on the residents of the community. If redeposition data becomes available that conclusively indicates that properties will be recontaminated from smelter operations, EPA will recommend to the state that residences within the voluntary purchase program zone not be re-occupied.

Question 4: Will data from the redeposition study be used to determine acceptable non-residential land uses?

Answer: EPA does not anticipate that lead redeposition will impact the acceptability of future commercial and industrial land uses with the exception of business that would attract young children for extended periods of time such as parks or daycare and babysitting facilities.

Question 5: What condemnation authorities or other programs exist to acquire non-vacated properties if assembly of large tracts is required for commercial, industrial, or other non-residential use?

Answer: The Superfund law provides EPA with authority to acquire by purchase or condemnation property that cannot otherwise be remediated by other means. This authority is solely available for sites listed on EPA's National Priorities List (NPL) and is used as a last resort to address unacceptable public health risks. See Section 104(j) of the Comprehensive Environmental Response, Compensation, and Liabilities Act.

Question 6: Under what circumstances might these condemnation programs be invoked?

Answer: As stated above, in rare circumstances where remediation of the properties is not a viable option. In addition, the site must be listed on the NPL to invoke these authorities.

Question 7: Are plans in place for reuse or dismantling and restoration of the plant property at such time that Doe Run or a successor owner ceases operations in Herculanum?

Answer: In the event that the smelter were to close, EPA would work with the facility to address contamination that would be left behind. Should the property owner or operator be unable or unwilling to assess the property, EPA has the authority to conduct the necessary sampling and analysis to determine if the property poses an unacceptable risk. The work would be conducted as part of EPA's standard site assessment protocols as outlined in the National Contingency Plan (40 CFR Section 300.410).

In conclusion, I wish to reiterate that our work is not completed in Herculanum. However, I am optimistic about the progress that has been made and the work scheduled for the upcoming months. If we may be of any further assistance, please feel free to contact me at 913-551-7006 or LaTonya Sanders, Congressional Liaison, at 913-551-7003.

Sincerely,

James B. Gulliford
Regional Administrator